



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,567	09/20/2001	Sunao Murata	212054US2PCT	1713
22850	7590	02/24/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			POKRZYWA, JOSEPH R	
			ART UNIT	PAPER NUMBER
			2622	
DATE MAILED: 02/24/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/889,567	MURATA, SUNAO	
	Examiner	Art Unit	
	Joseph R. Pokrzywa	2622	

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —
Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
 THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 20 September 2001.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-28 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 20 September 2001 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/24/02</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Response to Preliminary Amendment

1. Applicant's preliminary amendment was received on 9/20/01, and has been entered and made of record. Currently, **claims 1-28** are pending.

Information Disclosure Statement

2. The references listed in the Information Disclosure Statement submitted on 7/24/02 have been considered by the examiner (see attached PTO-1449).

Drawings

3. The drawings are objected to because the lettering within the figures is very small, making the drawing difficult to read. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either

Art Unit: 2622

“Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claims 1-9, 11, and 14-28** are rejected under 35 U.S.C. 102(e) as being anticipated by Akiyama *et al.* (U.S. Patent Number 6,771,378).

Regarding *claim 1*, Akiyama discloses a medium having a status information printing program recorded thereon to be run on a host computer in order for a printer to print status information (see Fig. 1, column 8, line 54-column 9, line 51, and column 55, lines 57-61), the host computer and the printer being connected for two-way communication (see Fig. 1, column 8, lines 56-64), the medium being characterized by causing the host computer to realize an output initiation instruction monitor function for monitoring the output initiation instruction for the status information that the printer outputs through the two-way communication (see Figs. 43A-43C, step, S1602, and column 55, line 41-column 56, line 43), a status information acquisition function on the host side for acquiring status information data from the printer through the two-way communication (step S1603, column 56, lines 5-43), a printing data

generation function for generating printing data to be printed by the printer based on the status information data acquired by the status information acquisition function on the host side when the output initiation instruction is recognized by the output initiation instruction monitor function (steps S1604-S1611, column 56, line 11-column 57, line 51), and a printing data output function for outputting to the printer through the two-way communication the printing data generated by the printing data generation function (steps S1613-S1614, column 57, line 49-column 58, line 8).

Regarding *claim 2*, Akiyama discloses the medium discussed above in claim 1, and further teaches that the printing data generated by the printing data generation function is dot image data (column 45, lines 8-42).

Regarding *claim 3*, Akiyama discloses the medium discussed above in claim 1, and further teaches that part of the status information data being in the printer whether the output initiation instruction exists or not (see Figs. 2A and 43A-43C, column 55, line 15-column 56, line 43), and initiation instruction monitor function monitoring whether the output initiation instruction is contained in the status information data acquired by the status information acquisition function on the host side (steps S101-S102, column 9, lines 55-67, and column 55, line 15-column 56, line 43).

Regarding *claim 4*, Akiyama discloses the medium discussed above in claim 1, and further teaches that the output initiation instruction being a trigger transmitted from the printer through the two-way communication (column 55, line 15-column 56, line 43), and the output initiation instruction monitor function judging whether the trigger is received (column 56, line 8-48).

Regarding *claim 5*, Akiyama discloses the medium discussed above in claim 1, and further teaches that the status information acquisition function analyzing the status of the printer based on the acquired status information data (column 56, line 8-column 57, line 48), and the status information acquisition function warning a user on the host computer if the printer can perform no printing (see Figs. 46-49).

Regarding *claim 6*, Akiyama discloses the medium discussed above in claim 1, and further teaches that the status information acquisition function acquiring the communication mode as the status information data when two-way communication is held with the printer (column 55, line 15-column 57, line 48).

Regarding *claim 7*, Akiyama discloses the medium discussed above in claim 1, and further teaches that the printing data generation function generating from a default file the form of the printing images to be printed by the printer (column 9, lines 25-51), then generating the character string image corresponding to the status based on the status information data (column 9, lines 25-51, column 32, lines 38-63, and column 44, line 55-column 45, line 7), and generating the printing image by superimposing them together (column 9, lines 25-51, column 32, lines 38-63, and column 44, line 55-column 45, line 7).

Regarding *claim 8*, Akiyama discloses a printer for holding two-way communication with a host computer and printing status information about the printer (see Fig. 1, column 8, line 54-column 9, line 51, and column 55, lines 57-61), the printer comprising an output initiation instruction unit for instructing the output initiation of the status information (controller 102, column 55, lines 36-56), a status information acquisition unit on the printer's side for acquiring status information data on the printer (column 56, lines 3-11), a status information output unit for

outputting through the two-way communication the status information data acquired by the status information acquisition unit on the printer's side (column 56, lines 3-18), and causing the host computer to generate printing data for the printer to print the status information (column 56, line 11-column 57, line 51), and a printing unit for receiving the printing data from the host computer through the two-way communication and performing predetermined printing based on the received data (column 57, line 49-column 58, line 8).

Regarding *claim 9*, Akiyama discloses the printer discussed above in claim 8, and further teaches that the printing data received by the printing unit is dot image data (column 45, lines 8-42).

Regarding *claim 11*, Akiyama discloses the printer discussed above in claim 8, and further teaches that the output initiation instruction unit outputting a trigger as the output initiation instruction through the two-way communication (column 55, line 15-column 56, line 43), and the status information output unit outputting the status information data acquired by the status information acquisition unit after the trigger is outputted (column 56, lines 8-48).

Regarding *claim 14*, Akiyama discloses a printing controller for causing a printer connected for two-way communication to print status information on the printer (see Fig. 1, column 8, line 54-column 9, line 51, and column 55, lines 57-61), the printing controller comprising an output initiation instruction monitor unit for monitoring the output initiation instruction for the status information that the printer outputs through the two-way communication (controller 102, column 55, lines 36-56), a status information acquisition unit on the host side for acquiring status information data from the printer through the two-way communication (column 56, lines 3-18), a printing data generation unit for generating printing

Art Unit: 2622

data to be printed by the printer based on the status information data acquired by the status information acquisition unit on the host side when the output initiation instruction monitor unit recognizes the output initiation instruction (column 56, line 11-column 57, line 51), and a printing data output unit for outputting to the printer through the two-way communication the printing data generated by the printing data generation unit (column 57, line 49-column 58, line 8).

Regarding *claim 15*, Akiyama discloses the controller discussed above in claim 14, and further teaches that the printing data generated by the printing data generation unit is dot image data (column 45, lines 8-42).

Regarding *claim 16*, Akiyama discloses the controller discussed above in claim 14, and further teaches that part of the status information data being in the printer whether the output initiation instruction exists or not (see Figs. 2A and 43A-43C, column 55, line 15-column 56, line 43), and the output initiation instruction monitor unit monitoring whether the output initiation instruction is contained in the status information data acquired by the status information acquisition unit on the host side (steps S101-S102, column 9, lines 55-67, and column 55, line 15-column 56, line 43).

Regarding *claim 17*, Akiyama discloses the controller discussed above in claim 14, and further teaches that the output initiation instruction being a trigger transmitted from the printer through the two-way communication (column 55, line 15-column 56, line 43), and the output initiation instruction monitor unit judging whether the trigger is received (column 56, line 8-48).

Regarding *claim 18*, Akiyama discloses the controller discussed above in claim 14, and further teaches that the status information acquisition unit analyzing the status of the printer

based on the acquired status information data (column 56, line 8-column 57, line 48), and the status information acquisition unit warning a user on the host computer if the printer can perform no printing (see Figs. 46-49).

Regarding *claim 19*, Akiyama discloses the controller discussed above in claim 14, and further teaches that the status information acquisition unit acquiring the communication mode as the status information data when two-way communication is held with the printer (column 55, line 15-column 57, line 48).

Regarding *claim 20*, Akiyama discloses the controller discussed above in claim 14, and further teaches that the printing data generation unit generating from a default file the form of the printing images to be printed by the printer (column 9, lines 25-51), then generating the character string image corresponding to the status based on the status information data (column 9, lines 25-51, column 32, lines 38-63, and column 44, line 55-column 45, line 7), and generating the printing image by superimposing them together (column 9, lines 25-51, column 32, lines 38-63, and column 44, line 55-column 45, line 7).

Regarding *claim 21*, Akiyama discloses a status information printing method for causing a printer to print status information under the control of a host computer, the printer and the host computer being connected for two-way communication (see Fig. 1, column 8, line 54-column 9, line 51, and column 55, lines 57-61), the method comprising an output initiation instruction monitor step for monitoring the output initiation instruction for the status information that the printer outputs through the two-way communication (see Figs. 43A-43C, step, S1602, and column 55, line 41-column 56, line 43), a status information acquisition step on the host side for acquiring status information data from the printer through the two-way communication (step

Art Unit: 2622

S1603, column 56, lines 5-43), a printing data generation step for generating printing data to be printed by the printer based on the status information data acquired in the status information acquisition step on the host side when the output initiation instruction is recognized in the output initiation instruction monitor step (steps S1604-S1611, column 56, line 11-column 57, line 51), and a printing data output step for outputting to the printer through the two-way communication the printing data generated in the printing data generation step (steps S1613-S1614, column 57, line 49-column 58, line 8).

Regarding *claim 22*, Akiyama discloses the method discussed above in claim 21, and further teaches that the printing data generated in the printing data generation step is dot image data (column 45, lines 8-42).

Regarding *claim 23*, Akiyama discloses the method discussed above in claim 21, and further teaches that part of the status information data being in the printer whether the output initiation instruction exists or not (see Figs. 2A and 43A-43C, column 55, line 15-column 56, line 43), and the output initiation instruction monitor step monitoring whether the output initiation instruction is contained in the status information data acquired in the status information acquisition step on the host side (steps S101-S102, column 9, lines 55-67, and column 55, line 15-column 56, line 43).

Regarding *claim 24*, Akiyama discloses the method discussed above in claim 21, and further teaches that the output initiation instruction being a trigger transmitted from the printer through the two-way communication (column 55, line 15-column 56, line 43), and the output initiation instruction monitor step judging whether the trigger is received (column 56, line 8-48).

Regarding *claim 25*, Akiyama discloses the method discussed above in claim 21, and further teaches that the status information acquisition step analyzing the status of the printer based on the acquired status information data (column 56, line 8-column 57, line 48), and the status information acquisition step warning a user on the host computer if the printer can perform no printing (see Figs. 46-49).

Regarding *claim 26*, Akiyama discloses the method discussed above in claim 21, and further teaches that the status information acquisition step acquiring the communication mode as the status information data when two-way communication is held with the printer (column 55, line 15-column 57, line 48).

Regarding *claim 27*, Akiyama discloses the method discussed above in claim 21, and further teaches that the printing data generation step generating from a default file the form of the printing images to be printed by the printer (column 9, lines 25-51), then generating the character string image corresponding to the status based on the status information data (column 9, lines 25-51, column 32, lines 38-63, and column 44, line 55-column 45, line 7), and generating the printing image by superimposing them together (column 9, lines 25-51, column 32, lines 38-63, and column 44, line 55-column 45, line 7).

Regarding *claim 28*, Akiyama discloses a status information printing system consisting of a host computer and a printer that are connected for two-way communication via a predetermined data transfer line (see Fig. 1, column 8, line 54-column 9, line 51, and column 55, lines 57-61), the system characterized by the printer being able to output status information data through the two-way communication to the host computer in accordance with a status information output initiation instruction (column 55, line 57-column 56, line 43), and perform

predetermined printing based on printing data outputted by the host computer (column 56, line 11-column 57, line 51), and the host computer acquiring the status information data outputted from the printer through the two-way communication (step S1603, column 56, lines 5-43), generating predetermined printing data based on the status information data (steps S1604-S1611, column 56, line 11-column 57, line 51), and outputting the printing data to the printer (steps S1613-S1614, column 57, line 49-column 58, line 8).

6. **Claims 8-13** are rejected under 35 U.S.C. 102(e) as being anticipated by Sato *et al.* (U.S. Patent Number 6,667,812).

Regarding *claim 8*, Sato discloses a printer for holding two-way communication with a host computer and printing status information about the printer (see Figs. 4, 5, 7, and 10, and column 5, lines 5-50), the printer comprising an output initiation instruction unit for instructing the output initiation of the status information (column 5, line 59-column 6, line 11), a status information acquisition unit on the printer's side for acquiring status information data on the printer (column 5, line 59-column 6, line 11), a status information output unit for outputting through the two-way communication the status information data acquired by the status information acquisition unit on the printer's side (column 5, line 36-column 6, line 39), and causing the host computer to generate printing data for the printer to print the status information (column 4, lines 13-60, and column 7, lines 35-65), and a printing unit for receiving the printing data from the host computer through the two-way communication and performing predetermined printing based on the received data (column 1, line 8-column 2, line 30, and column 4, lines 36-60).

Regarding *claim 9*, Sato discloses the printer discussed above in claim 8, and further teaches that the printing data received by the printing unit is dot image data (column 3, lines 7-17).

Regarding *claim 10*, Sato discloses the printer discussed above in claim 8, and further teaches that the status information acquisition unit includes a status information data storage part for storing status information data (column 5, line 59-column 6, line 11), and writing the output initiation instruction as part of the status information data in accordance with the output initiation instruction of the output initiation instruction unit (column 5, line 59-column 6, line 11), and the status information output unit outputting through the two-way communication the status information stored in the status information data storage part (column 6, lines 12-39).

Regarding *claim 11*, Sato discloses the printer discussed above in claim 8, and further teaches that the output initiation instruction unit outputting a trigger as the output initiation instruction through the two-way communication (column 5, lines 59-column 6, lines 39, and column 9, line 20-column 10, line 4), and the status information output unit outputting the status information data acquired by the status information acquisition unit after the trigger is outputted (column 5, lines 59-column 6, lines 39, and column 9, line 20-column 10, line 4).

Regarding *claim 12*, Sato discloses the printer discussed above in claim 8, and further teaches that the output initiation instruction includes a predetermined instruction button, multiple operation of gives the output initiation instruction (column 6, line 62-column 7, line 30).

Regarding *claim 13*, Sato discloses the printer discussed above in claim 8, and further teaches that the status information acquisition unit acquiring fixed status information only when the printer is booted, and the status information acquisition unit acquiring sequentially updated

status information when the status is updated (column 6, lines 12-39, and column 13, lines 21-27).

Citation of Pertinent Prior Art

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Hines (U.S. Patent Number 6,392,758) discloses a system that communicates with a bi-directional printer;

Webb et al. (U.S. Patent Number 5,727,135) discloses a system that monitors the status of multiple printers; and

Hibino (U.S. Patent Number 5,694,618) discloses a printing system that utilizes a bi-directional interface.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joe Pokrzywa whose telephone number is (703) 305-0146. The examiner can normally be reached on Monday-Friday, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (703) 305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joseph R. Pokrzywa
Examiner
Art Unit 2622

jrp

